



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/089,854

10/07/2002

Jiang Gu

0887-4151US1

5258

27123

7590

10/01/2004

MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER

BLACKMAN, ANTHONY J

ART UNIT

PAPER NUMBER

2676

6

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,854

Applicant(s)

GU ET AL

Examiner

ANTHONY J BLACKMAN

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 07 October 2002.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-58 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-58 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/22/2002

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 13-15, 18, 20, 26-34, 38-41, 43-45 and 47-58 are rejected under 35 U.S.C. 102(b) as being anticipated by KAMENTSKY et al, US Patent No. 5,793,969.

3. As per claim 1, KAMENTSKY et al disclose A method of using a computer system as a telemicroscope, comprising:

(a) capturing a first image corresponding to an area of a specimen with a digital image capturing device (figures 2-4, column 1, line 66-column 2, line 8);

(b) capturing at least one second image corresponding to a selected area of the first image, said second image having a different magnification from the first image (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(c) storing the first and second images in a computer-readable medium (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(d) generating a linking information, map indicating the relationship between said first

and second images(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

4. As per claim 2, KAMENTSKY et al meet limitations of claim 1, wherein said capturing of second image is performed a plurality of times on different selected areas of the specimen(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein the linking information map links the first image to each of the plurality of second images(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

5. As per claim 3, KAMENTSKY et al meet limitations of claim 2, further comprising choosing a desired area of the first image for obtaining a corresponding magnified second image thereof after said generating of the linking information map.

6. As per claim 4, KAMENTSKY et al meet limitations of claim 3, wherein the linking information map facilitates the viewing of a desired area of the specimen by providing the appropriate second image linked to said desired area of the first image (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

7. As per claim 13, KAMENTSKY et al disclose A method of using a computer system as a telemicroscope, comprising:

- (a) capturing a plurality of images corresponding to different segments of a specimen with a digital image capturing device(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), said images having different magnification levels (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);
- (b) generating a linking information map for said images of the specimen indicating relationships between said images of the different segments of the specimen(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and
- (c) storing said images and linking information map in a computer-readable medium, wherein the information map allows a user to view said specimen under different magnification levels(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

8. As per claim 14, KAMENTSKY et al meet limitation of claim 13, wherein the linking information map facilitates viewing of a desired segment of the specimen by providing the appropriate image corresponding to the desired magnification level of said desired segment of said image (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67)..

9. As per claim 15, KAMENTSKY et al meet limitation of claim

14, further including posting the images and the information map to a network for allowing a remote user to access said images and said information map after said storing (figures 1-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

10. As per claim 18, KAMENTSKY et al meet limitation of claim 14, wherein the digital image capturing device is a digital camera (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

11. As per claim 20, KAMENTSKY et al disclose A method of using a computer system as a telemicroscope comprising:

(a) storing a captured first image of a specimen electronically (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67) , wherein the first image includes the entire specimen (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), said first image captured with a digital image capturing device (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(b) storing a captured second image of the specimen electronically (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein the second image includes a smaller area of the specimen and has a higher magnification level than said first image (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), said second image captured with a digital

image capturing device(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(c) generating an information map for linking said first image with said second image(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein said information map allows a user to view a magnification of a selected area of said first image by uploading the appropriate second image that corresponds to said selected area(figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

12. As per claim 26, KAMENTSKY et al disclose A method of using a computer system as a telemicroscope comprising:

(a) receiving from a user a location for an index file, said index file stored on a computer-readable medium (column 8, line 28-column 9, line8);

(b) retrieving said index file(column 8, line 28-column 9, line8), said index file listing a plurality of image files(column 8, line 28-column 9, line8), wherein each of said image file has an image of a specimen and map information of linked images (column 8, line 28-column 9, line8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(c) displaying on the monitor screen of the user's computer system the listing of the plurality of image files from the index file(column 8, line 28-column 9, line 8);

(d) receiving from the user a first file name comprising an image of the entire specimen(column 8, line 28-column 9, line8 and figures 2-4, column 1, line 66-column

Art Unit: 2676

2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein the first file name is linked to a second file name comprising an image of a selected area of the specimen(column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein said image of said second file name has a different magnification level from the image in said first file name(column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(e) displaying dynamically the images of said first and second file name allowing a user to view the specimen with different magnification levels of the specimen(column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

13. As per claim 27, KAMENTSKY et al meet limitations of claim 26, wherein the location of said index file is selected from a group consisting of an Internet URL, a path of an intranet, and a local file (a local file is at least disclosed column 9, lines 34-47).

14. As per claim 28, KAMENTSKY et al meet limitations of claim 26, wherein said displaying includes providing a tool bar on the monitor screen of the computer system for allowing a user to select different viewing and navigation options (figures 2-3 and column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

15. As per claim 29, KAMENTSKY et al meet limitations of claim 28, wherein said tool bar provides a magnifying means to view the specimen (figures 2-3 and column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

16. As per claim 30, KAMENTSKY et al meet limitations of claim 29, wherein said magnifying means magnifies the specimen between 1.5 and 5 times from the displayed image on the screen without losing resolution (figures 2-3 and (column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

17. As per claim 31, KAMENTSKY et al meet limitations of claim 29, wherein said magnifying means comprises a movable virtual lens for allowing the user to adjust the magnification level and select the section of the specimen being magnified thereby dynamically displaying the magnified portion of the image on the entire screen (figures 2-4 and column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

18. As per claim 32, KAMENTSKY et al meet limitations of claim 31, wherein the movable virtual lens is a viewing window on a monitor of said computer system (figures 1-4, column 1, lines 18-52 and column 3, lines 4-24).

19. As per claim 33, KAMENTSKY et al meet limitations of claim 29, wherein said magnifying means is a virtual microscope with a virtual slide that allows a user to view the specimen, wherein said virtual microscope is provided with a virtual objective lens which is situated on top of said virtual slide thereby allowing the encased area within the virtual objective lens to be enlarged onto the entire monitor screen dynamically and allowing the user to adjust the magnification level (figures 2-3 and column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

20. As per claim 34, KAMENTSKY et al meet limitations of claim 33, wherein said virtual objective lens is movable on a monitor screen of said computer system to allow said objective lens to move around on said virtual slide thereby dynamically displaying the enlarged portion of the image on the entire screen (figures 2-3 and column 8, line 28-column 9, line 8 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

21. As per claim 38, KAMENTSKY et al disclose a method of using a computer system as a telemicroscope comprising: (a) capturing a plurality of images of a specimen, wherein the images correspond to an entire specimen and a plurality of segments of said specimen, wherein images corresponding to said plurality of segments have different magnification levels (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(b) generating a linking map between said images wherein said linking map comprises information regarding geographical location of the images in relation to the specimen's structure (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(c) transmitting said images and said linking map to a remote user via a computer network thereby allowing the user to view the images with different magnification levels (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

22. As per claim 39, KAMENTSKY et al meet limitations of claim 38, wherein said plurality of images are captured with a digital image capturing device (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

23. As per claim 40, KAMENTSKY et al meet limitations of claim 39, further including storing said images and said linking map on an electronic medium (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

24. As per claim 41, KAMENTSKY et al meet limitations of claim 40, wherein said transmitting comprises encrypting said images and said linking map KAMENTSKY et al meet limitations (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

Art Unit: 2676

25. As per claim 43, A system for using a computer system as a telemicroscope, comprising:

(a) a memory unit (figure 1, elements 4 and 8, column 7, lines 49-67 and column 8, lines 1-63)

(b) a processing unit in communication with said memory unit (figure 1, element 4 and column 7, lines 49-67 and column 8, lines 1-63), wherein said processing unit is configured to:

i. capture a first image corresponding to an area of a specimen (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

ii. capture at least one second image corresponding to a selected area of said first image, said second image having a different magnification from the first image (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

iii. store the first and second images in a computer-readable medium (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

iv. generate a linking information map indicating the relationship between said first and second images (figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

26. As per claim 44, KAMENSKY et al meet limitations of claim 43, further comprising a digital image capturing device for capturing said first image and second

Art Unit: 2676

image, said digital image capturing device in communication with said processor unit(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

27. As per claim 45, KAMENTSKY et al meet limitations The system of claim 44, wherein said digital image capturing device is a digital camera (figure 1, element 8).

28. As per claim 46, KAMENTSKY et al meet limitations of claim 44. KAMENTSKY et al also meet claim 46 limitations, wherein said digital image capturing device is a scanner.(column 6, lines 28-51).

29. As per claim 47, examiner interprets KAMENTSKY et al to disclose a system for using a computer system as, a telemicroscope, comprising:

(a) a memory unit (figure 1, elements 4 and 8 and column 7, lines 49-67 and column 8, lines 1-63);

(b) a processing unit in communication with said memory unit (figure 1, element 4 and column 7, lines 49-67 and column 8, lines 1-63), wherein said -processing unit is configured to:

i. receive a location for an index file, said index file stored on said memory unit (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

ii. retrieve said index file, said index file listing a plurality of image files, wherein each of said image file has an image of a specimen (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

iii. display the listing of the plurality of image files from the index file(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

iv. receive a first file comprising an entire background image of the specimen(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

v. receive a first file comprising an image of a portion of the specimen, wherein said image in said second file has a different magnification level from the image in said first file(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

vi. display the image of said first file and the image of said second file for allowing a user to view the specimen with different magnification levels of the specimen (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

30. As per claim 48, examiner interprets KAMENTSKY et al to disclose a system for using a computer system as a telemicroscope, comprising:

(c) a memory unit (figure 1, elements 4 and 8 and column 7, lines 49-67 and column 8, lines 1-63);

(d) a processing unit in communication with said memory unit (figure 1, elements 4 and 8 and column 7, lines 49-67 and column 8, lines 1-63), wherein said processing unit is configured to:

i. capture a plurality of images of a specimen, wherein the images correspond to the entire specimen and a plurality of segments of said specimen, wherein images corresponding to said plurality of segments have different magnification levels (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

ii. generate a linking map between said images wherein said linking map comprises information regarding geographical location of the images in relation to the specimen's structure (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

iii. transmit said images and said linking map to a remote user via a computer network thereby allowing the user to view the images with different magnification levels (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

31. As per claim 49, examiner interprets KAMENTSKY et al to disclose a system for using a computer system a. a telemicroscope, comprising:

(a) means for capturing a first image corresponding to an area of a specimen with a digital image capturing device (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(b) means for capturing at least one second image corresponding to a selected area of the first image, said second image having a different magnification from the first image (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).;

(c) means for storing the first and second images in a computer-readable medium (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(d) means for generating a linking information map indicating the relationship between said first and second images (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

32. As per claim 50, examiner interpret KAMENTSKY et al to disclose a system for using a computer system as a telemicroscope, comprising:

(a) means for receiving a location for an index file (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), said index file stored on a computer-readable medium;

(b) means for retrieving said index file, said index file listing a plurality of image files, wherein each of said image file has an image of a specimen (column 8,

lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(c) means for displaying the listing of the plurality of image files from the index file (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(d) means for receiving a first file comprising an image of the entire specimen, wherein the first file is linked to a second file comprising an image portion of the specimen ((column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein said the image in said second file has a different magnification level from the image in said first file (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(e) means for displaying the image of said first image of said first file and the image of said second file for allowing a user to view the specimen with different magnification levels of the specimen (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

33. As per claim 51, examiner interprets KAMENTSKY et al to disclose a system for using a computer system as a telemicroscope, comprising:

(a) means for capturing a plurality of images of a specimen(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein the images correspond to the entire specimen and a plurality of

Art Unit: 2676

segments of said specimen(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), wherein images corresponding to said plurality of segments have different magnification levels (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(b) means for generating a linking map between said images wherein said linking map

comprises information regarding geographical location of the images in relation to the specimen's structure (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(c) means for transmitting said images and said linking map to a remote user via a computer network thereby allowing the user to view the images with different magnification levels (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

34. As per claim 52, examiner interprets KAMENTSKY et al to disclose a computer readable medium comprising:

(a) instruction code for capturing a first image corresponding to an area of a specimen with a digital image capturing device (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(b) instruction code for capturing at least one second image corresponding to a selected area of the first image(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), said second image

having a different magnification from the first image(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(c) instruction code for storing the first and second images in a computer-readable medium (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(d) instruction code for generating a linking information map indicating the relationship between said first and second images(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

35. As per claim 53, examiner interprets KAMENTSKY et al to disclose a computer-readable medium comprising:

(a) instruction code for receiving a location for an index file, said index file stored on a computer-readable medium (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(b) instruction code for retrieving said index file, said index file listing a plurality of image files, wherein each of said image file has an image of a specimen(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(c) instruction code for displaying the listing of the plurality of image files from the index file(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67);

(d) instruction code for receiving a first file comprising an image of the entire specimen, wherein the first file is linked to a second file comprising an image of a portion of the specimen, wherein said the image in said second file has a different magnification level from the image in said first file(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67); and

(e) instruction code for displaying the image of said first file and the image of said second file for allowing a user to view the specimen with different magnification levels of the specimen(column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

36. As per claim 54, KAMENTSKY et al meet limitations of claim 28, including wherein said toolbar provides a measurement function thereby enabling the user to directly measure the images on the monitor screen (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

37. As per claim 55, KAMENTSKY et al meet limitations of claim 54, wherein the measurement function enables a user to calibrate a measuring unit by referring to a known distance of the specimen thereby ensuring an accurate reading of distances on the monitor screen at any magnifications of the original image (column 9, lines 34-47, column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

Art Unit: 2676

38. As per claim 56, KAMENTSKY et al meet limitations of claim 54, including wherein said toolbar provides an imager database linkage (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67), thereby enabling the user to compare the images instantly by retrieving the images from said database column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

39. As per claim 57, KAMENTSKY et al meet limitations of claim 55, including, wherein said database is located remotely from the user's computer and connected to the user's computer through a computer network (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

40. As per claim 58, KAMENTSKY et al meet limitations of claim 54, wherein said tool bar provides a text data association function thereby allowing the user to associate the text data to the images for a future reference (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).

Claim Rejections - 35 USC § 103

41. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

42. Claims 5-12, 17, 19, 22-25, 36-37 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAMENTSKY et al, US Patent No. 5,793,969 in view of JAIN et al, US Patent No. 5,893,095.

43. As per claim 5, KAMENTSKY et al does not expressly teach of claim 4.

However, JAIN et al suggests wherein said first and second images are stored in a similar format, wherein said format is one of JPG, GIF, TIF or BUT. JAIN et al suggest JPG and GIF (column 29, lines 60-68). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

44. As per claim 6, KAMENTSKY et al as modified does not meet limitations of claim 4. However, JAIN et al suggests limitations of claim 6, wherein said first image is stored in a format chosen from a group consisting of JPG, GIF, TIF and BMP. JAIN et al

suggest JPG and GIF (column 29, lines 60-68). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

45. As per claim 7, KAMENTSKY et al as modified does not meet limitations of claim 4,. However, JAIN et al suggest, wherein said second image is stored in a format chosen from a group consisting of JPG, GIF, TIF and BMP. JAIN et al suggest JPG and GIF (column 29, lines 60-68). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to

Art Unit: 2676

improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

46. As per claim 8, KAMENSKY et al as modified meet limitations of claim 5.

KAMENSKY et al also meet limitations for claim 8, further comprising storing of the information map in said computer-readable medium (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).. It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

47. As per claim 9, KAMENSKY et al as modified meet limitations of claim 8.

KAMENSKY et al disclose all three of the following features, wherein said computer-readable medium is one of computer hard drive, portable disk or CD (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67). It would have been obvious at the time of the invention to utilize

the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

48. As per claim 10, KAMENTSKY et al as modified meet limitations of claim 8. KAMENTSKY et al does not expressly teach the limitations of claim 10.

JAIN et al suggest, wherein said computer-readable medium is a web server (column 27, lines 43). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

49. As per claim 11, KAMENTSKY et al meet limitations of claim 8. KAMENTSKY et al also suggest, wherein the digital image capturing device is a digital camera column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al. to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

50. As per claim 12, KAMENTSKY et al as modified meet limitations of claim 8. KAMENTSKY et al also meet claim 12 limitations, wherein the digital image capturing device is a scanner (column 6, lines 28-51). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the

addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

51. As per claim 17, KAMENTSKY et al as modified meet limitations of claim 14.

KAMENTSKY et al does not expressly teach the limitations of claim 17.

JAIN et al suggest, wherein said images are stored in a similar format, wherein said format is one of JPG, GIF, TIF or BMP. JAIN et al suggest JPG and GIF (column 29, lines 60-68). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

52. As per claim 19, KAMENTSKY et al as modified meet limitations of claim 14.

KAMENTSKY et al also meet claim 16 limitations, wherein the digital image capturing device is a scanner (column 6, lines 28-51). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for

Art Unit: 2676

content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

53. As per claim 22, KAMENSKY et al as modified meet limitations of claim 20.

KAMENSKY et al does not expressly teach the limitations of claim 22. JAIN et al suggest, wherein said first image and said second

image are each stored in a similar format, wherein said format is one of JPG, GIF, TIF or BUT. JAIN et al suggest JPG and GIF (column 29, lines 60-68). It would have been

obvious at the time of the invention to utilize the JPG, scanner and web server

mechanism allowing for content based search and retrieval of visual objects (see

Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENSKY et al because both inventions teach image

comparison and image analysis of files collected from the means of a

database/network system. Further, the addition of JAIN et al improves the system

operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

54. As per claim 23, KAMENTSKY et al as modified meet limitations of claim 22. KAMENTSKY et al also meet claim 23 limitations, where said first image and said second image are stored on a computer-readable medium. (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

55. As per claim 24, KAMENTSKY et al as modified meet limitations of claim 20. KAMENTSKY et al also meet claim 24 limitations, further including, compiling the information map, after said storing of said captured second image (column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67).. It would have been obvious at the time of the invention to utilize the JPG,

scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

56. As per claim 25, KAMENTSKY et al as modified meet limitations of claim 24. KAMENTSKY et al also meet claim 25 limitations, wherein the information map is stored on a computer-readable medium column 8, lines 28-63 and figures 2-4, column 1, line 66-column 2, line 8, column 3, lines 4-24, column 7, lines 56-67). It would have been obvious at the time of the invention to utilize the JPG, scanner and web server mechanism allowing for content based search and retrieval of visual objects (see Abstract, lines 1-2) of JAIN et al to modify the network system of review and analysis of computer encoded microscopic slides and specimens which were originally encoded from a microscope of KAMENTSKY et al because both inventions teach image comparison and image analysis of files collected from the means of a database/network system. Further, the addition of JAIN et al improves the system operability with a threshold-based comparison [is] utilized to improve performance of the VIR (virtual information retrieval) engine (Abstract, lines 18-19).

57. Claims 16, 21, 36-37 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAMENTSKY et al , US Patent No. 5,793,969 in view of WEINSTEIN, US Patent NO. 5,216,596.

58. As per claim 16, KAMENTSKY et al as modified meet limitations of claim 20. KAMENTSKY et al does not expressly teach the limitations of claim 22

The method of claim 14, further including sending the images and the information map to a remote user via an e-mail for allowing the remote user to access said images and said linking information map after said storing (internet/e-mail means figures 2-5, column 6, lines 32-37 at least among the group of items above). It would have been obvious at the time of the invention to utilize the "Telepathology Diagnostic Network" including the remote sensor means, and e-mail means of WEINSTEIN to modify the visual information management means of KAMENTSKY et al as modified because WEINSTEIN's pathology diagnostic device increases user operability of the modified device of KAMENTSKY et al with the addition of a remote access and utilization of e-mail capability.

59. As per claim 21, KAMENTSKY et al as modified meet limitations of claim 20. KAMENTSKY et al does not expressly teach the limitations of claim 22

The method of claim 20, further including sending the images and the information map to a remote user via an e-mail for allowing the remote user to access said images and said information map after said storing. (internet/e-mail means figures 2-5, column 6, lines 32-37 at least among the group of items above). It would

have been obvious at the time of the invention to utilize the "Telepathology Diagnostic Network" including the remote sensor means, and e-mail means of WEINSTEIN to modify the visual information management means of KAMENTSKY et al as modified because WEINSTEIN's pathology diagnostic device increases user operability of the modified device of KAMENTSKY et al with the addition of a remote access and utilization of e-mail capability.

60. As per claim 36, KAMENTSKY et al as modified meet limitations of claim 26. KAMENTSKY et al does not expressly teach the limitations of claim 36. WEINSTEIN suggest further comprising receiving communication request from a user to discuss the specimen with another user, said communication request received via a communication means (at least using e-mail means -see figures 2-5, column 6, lines 32-37). It would have been obvious at the time of the invention to utilize the "Telepathology Diagnostic Network" including the remote sensor means, and e-mail means of WEINSTEIN to modify the visual information management means of KAMENTSKY et al as modified because WEINSTEIN's pathology diagnostic device increases user operability of the modified device of KAMENTSKY et al with the addition of a remote access and utilization of e-mail capability.

61. As per claim 37, KAMENTSKY et al as modified meet limitations of claim 36. KAMENTSKY et al does not expressly teach the limitations of claim 37. WEINSTEIN suggests, at least email means, wherein said communication means is selected from a

Art Unit: 2676

group consisting of e-mail, video conferencing, whiteboard image sharing, chat room, and Internet telephony (see figures 2-5, column 6, lines 32-37). It would have been obvious at the time of the invention to utilize the "Telepathology Diagnostic Network" including the remote sensor means, and e-mail means of WEINSTEIN to modify the visual information management means of KAMENTSKY et al as modified because WEINSTEIN's pathology diagnostic device increases user operability of the modified device of KAMENTSKY et al with the addition of a remote access and utilization of e-mail capability.

62. As per claim 42, KAMENTSKY et al meet limitations of claim 41, however, does not expressly teach wherein the computer network is selected from a group consisting of an Internet, intranet, and a local area network. WEINSTEIN suggest wherein the computer network is selected from a group consisting of an Internet, intranet, and a local area network (internet/e-mail means figures 2-5, column 6, lines 32-37 at least among the group of items above).

It would have been obvious at the time of the invention to utilize the "Telepathology Diagnostic Network" including the remote sensor means, and e-mail means of WEINSTEIN to modify the visual information management means of KAMENTSKY et al as modified because WEINSTEIN's pathology diagnostic device increases user operability of the modified device of KAMENTSKY et al with the addition of a remote access and utilization of e-mail capability.

63. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over KAMENTSKY et al, US Patent No. 5,793,969.

64. As per claim 35, KAMENTSKY et al meet limitations of claim 33, however, does not expressly teach the magnification capacity of said virtual objective lens is up to 200 from the original size of said specimen. It would have been obvious at the time of the invention that increasing magnification is a well-known feature.

Conclusion

65. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patents share the same assignee and inventors, BACUS et al disclosing a system enabling a pathologist, for example, to perform tissue analysis or quantitative analysis using a standard computer terminal from a location remote from the automated microscope; 6,226,392; 6,404,906; and 6,101,265.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J BLACKMAN whose telephone number is 703-305-0833. The examiner can normally be reached on FLEX SCHEDULE.

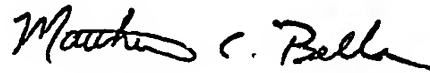
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANTHONY J BLACKMAN
Examiner
Art Unit 2676



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600